agri-fax
Field Crops
Alberta AGRICULTURE

93-02353/

May 1992

Agdex 142/33-35

Varietal Description of Patriot Field Pea

Origin and breeding

Patriot yellow field pea, tested as SV84539, originates from the cross JI 113 x Birte made by Svalof AB, Svalov, Sweden in 1978. A single plant was selected in the F_4 generation and was advanced to the F_8. Selection criteria included yield, early maturity, stem strength and protein content. Breeder seed was bulked in the F_8 generation.

Varietal characteristics

Plant characteristics

Vines: approximately 65 cm; shorter than Century, Titan and Tara, slightly longer than Express

Leaves: leaflets absent, modified to tendrils; normal stipules

Flowers: white

Maturity: early, 4 days earlier than Express

Disease reaction: moderate resistance to Mycosphaerella blight (*Mycosphaerella pinodes*) and susceptibility to powdery mildew (*Erisyphe polygoni*)

Seed characteristics

Color: yellow cotyledons

Size: 202 grams per 1,000 seeds; slightly smaller than Express

Shape: round

Seed Coat: smooth

Cooking Quality: good to average, better than Century, Titan and Express

Protein Content: about 25%; similar to Express

Performance and adaptation

Patriot is a good yielding variety with early maturity, average protein content and good to average cooking quality. Patriot is suceptible to powdery mildew, but is moderately resistant to Mycosphaerella blight. Patriot is adapted to pea growing areas in western Canada.

Maintenance of breeder seed

Svalof AB, Svalov, Sweden

Canadian distributor

Bonis and Company Ltd.

Recommended by

Prairie Registration Recommending Committee on Grain - Special Crops Subcommittee

Table 1. Agronomic performance of Patriot yellow-type field pea and check varieties, Western Co-operative field pea tests, 1988-1990

Variety	Yield (kg/ha)		1000 Seed weight (g)		Days to mature		Vine length (cm)		Protein %	
Station Years	26	(8)	21	(4)	14	(6)	16	(5)	16	(3)
Patriot	2553	(2422)	202	(217)	86	(92)	65	(71)	25.9	(28.6)
Century	2252	—	224	—	94	—	97	—	26.5	—
Titan	2310	—	241	—	95	—	102	—	25.6	—
Express	2701	—	218	—	90	—	58	—	26.0	—
Tara	—	(2345)	—	(216)	—	(98)	—	(92)	—	(27.5)

Locations: Morden (1988-90), Portage La Prairie (1988-90), Carrot River (1988), Vermilion (1988), Stettler (1988-90), Calmar (1988-89), Melfort (1989-90), Fort Vermilion (1988-90), New Liskeard (1988-89), Regina (1989), Saskatoon (1989-90), Olds (1989-90), Indian Head (1990).
( ) 1990 data only. Tara not grown in previous years

Copies of this and related publications may be obtained from the Print Media Branch, Alberta Agriculture, 7000 - 113 Street, Edmonton, Alberta T6H 5T6 or Alberta Agriculture's District Offices.

Table 2. Cooking Quality

	Color		Granulation		Viscosity	
Station Yrs	13	(3)	13	(3)	13	(3)
Patriot	2.7	(2.7)	2.7	(2.8)	19.8	(24.0)
Century	3.1	—	3.0	—	19.7	—
Titan	3.5	—	3.5	—	21.0	—
Express	3.3	—	3.3	—	20.9	—
Tara	—	(3.1)	—	(2.8)	—	(24.0)

** Color and granulation were subjectively evaluated on a scale of 1-5 where 1 = very good, 2 = good, 3 = average, 4 = fair and 5 = poor. A scale of 1-24 was used for viscosity where 1 = high and 24 = low.
( ) 1990 data only. Tara not grown in previous years.

Table 3. Disease reaction of Patriot yellow-type field pea and check varieties, Western Co-operative field pea trials, Morden, 1990

Variety	Mycosphaerella Blight Resistance (1-9) *
Patriot	4.6
Century	5.8
Tara	5.7
Titan	5.6
Express	5.1

* 1 = no infection, 9 = 100% of leaf area infected

1992 06 3M